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AUTHOR Bull, C. Neil
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ABSTRACT

The present study is a continuation of a series of studies dealing with predictions of future daily behaviors. Because of the finite nature of time, people have to make choices among activities, bearing in mind the duration of such activities. The dimension of "discretion", which deals specifically with the duration of time a person spends on an activity, is introduced as a determinant of action; this is in contrast to the findings of earlier studies which credited the stability and routinization of an individual's social life as the best predictor of stability of behavior in that position. Research was done with senior classes in sociology during the first week of a new semester and again halfway through that semester in an effort to determine the subjects ability to predict what they would do during the next day. Data show that leisure and social activities are most flexible in that they are included and dropped most frequently in a day and that they are also least well predicted with respect to time. The author feels that his findings lend further support to the concept of discretion as the central dimension to the measurement of leisure. Weak support is given to the contention that the routinization of social life as measured by length of time spent in a position reduces the errors in predicting future behaviors. References are included. (Author/SFS)

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C. Neil Bull
Assistant Professor
Department of Sociology - University of Missouri-Kansas City
Research Associate
Institute for Community Studies
Kansas City, Missouri

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PREDICTIONS OF FUTURE DAILY BEHAVIORS: A FURTHER REPLICATION

Because of the finite nature of time, people have to make choices among activities bearing in mind the duration of such activities. This decision-making process with respect to the time to be spent on activities is central to the concept leisure because one of the important dimensions used to measure leisure behavior is the freedom to choose when and for how long a leisure activity is to be carried out. This dimension has been named "discretion" and deals specifically with the duration of time a person spends on an activity. Two measures of this dimension have been made. First, it was found (Bull, 1971) that leisure activities were those activities with the greatest variability with respect to the time spent on them. Second, when asking people to predict their future behaviors it was found (Bull, 1972) that leisure activities were those activities least accurately predicted both with respect to the time it was estimated would be spent on them and their being included or dropped out of the day the most. These findings give support to the concept of "discretion" as a dimension of leisure where people are able to start and finish, omit or include, activities when they wish to do so.

The present study is a continuation of a series of studies dealing with predictions of future daily behaviors. It has been previously stated (Sorokin and Berger, 1939:170) that "The more stable and routine the social life of an individual . . . the higher the accuracy of prediction." To support this statement Sorokin and Berger showed a " . . . definite decrease in error of prediction and a consequent increase in stability of behavior with increasing age." (Sorokin and Berger, 1939:168.) A replication of their study

carried out in 1971 (Bull, 1972) could not confirm their finding concerning age nor similar hypotheses dealing with length of residence in present urban location or length of residence in present dwelling; both variables which were felt to measure the stability and routinization of social life. The present study aims at a more experimental manipulation of the variable of stability. It would be predicted that the longer a person has been in a position the greater the stability of that person's behavior in that position and, therefore, the greater the predictability of future events by that person.

Methodology

The research to be outlined used the time-budget predictive technique to look at persons soon after their entry to a new position and to re-test them at a later date to see if their accuracy of predictions had increased. The sample consisted of two senior classes in Sociology of 28 and 32 students. The experimental group of 28 students were tested at two stages during the Fall semester of 1971 at an urban university in the Midwest. The first test was during the first week of the semester and the second test halfway through the semester. The control group of 32 students was tested only once, halfway through the semester. At each testing session the students were asked to predict what they would do during the next day and to make their predictions on a time-budget diary. On the day they had predicted a similar diary was used by them to record their actual behaviors. The experimental group carried out these procedures twice while the control group only once, thus allowing for a test of any test-re-test effect.

It would be predicted, therefore, that confirmation of the hypothesis that the greater the length of time spent in a position the greater the predictability of future events, would require that for the experimental group of 28 students errors of prediction at time II would be less than errors of prediction at time I. Two prediction error indices were used. In comparing the prediction diary with the actual diary an index of

omission, events predicted but not carried out or events carried out but not predicted, was computed. The second index dealt with errors in the amount of time spent on activities and was labeled the "average duration error" and was calculated by dividing the sum of the differences of the durations of activities between diaries, by the number of correctly predicted activities.

A second set of data will be presented which are of more direct importance to the Sociology of Leisure. It has been previously discovered (Bull, 1972) using a sample of married working males, that leisure activities were those activities most often omitted or included in error and activities least accurately predicted with respect to the amount of time to be spent on them. The present study can use both the control and experimental groups to replicate these previous findings and thus strengthen the support given to the concept of "discretion" as a prime dimension of a leisure activity.

Results

The results which allow for the test of the hypothesis regarding length of time in a position and the subsequent decrease in errors of prediction are shown in Table 1.

TABLE 1
Comparison of Errors of Prediction by
Experimental and Control Groups

INDEX	Experimental Group		Control Group
	TIME I	TIME II	TIME II
Omission Error (ratio)	.284 $T=1.97 P<.05$.207 $T=1.05 (ns)$.240
Average Duration Error Per Activity (in minutes)	29.37 $T=.96 (ns)$	25.37 $T=.39 (ns)$	26.75
N	28	28	32

From Table 1 it can be seen that the hypothesis receives support in that the experimental group decreased its errors of prediction from ^{19%}.284 to ^{20%}.207 in the case of the omission error and from 29.37 to 25.37 minutes in the case of the average duration error. However, when we compare the scores of the experimental group with those of the control group at time two (.207 versus .240 and 25.37 versus 26.75 minutes) it can be seen that there is a testing effect thus reducing the importance of the changes in the experimental group as outlined above.

The second set of results deal with the errors of prediction of specific activities. It has been previously shown (Sorokin and Berger, 1939; Bull, 1972) that activities dealing with physical and economic needs have less prediction errors than do activities designated as leisure and social activities. As in the study carried out in 1971 (Bull, 1972) the designation of what was to be categorized as a physical, economic, and leisure or social activity, was taken when possible from the Multinational Comparative Time-Budget Study (Szalai, 1966). Two measures were used: the percentage of times an activity was omitted or included and the average duration error as a ratio of the total time spent on an activity. The data for work related activities (in the present student sample class attendance is equated with work) are presented in Table 2, for physical need activities in Table 3 and for leisure and social activities in Table 4.

On comparing the data presented in Tables 2, 3, and 4 it was found that as in previous studies, leisure and social activities were the least well predicted activities. First, with respect to the percentage of times activities were omitted or included, it was found that on the average work related activities had a 34 per cent omission error, physical need activities a 38 per cent omission error, and leisure and social activities a 62 per cent omission error. Second, with respect to the average duration error the figures were: work related activities a ratio of .55, physical need activities a ratio of .56 and leisure and social activities a ratio of .77. (These figures compare with 30%, 39% and 68% and .41, .58 and .81 in a previous study (Bull, 1972).

TABLE 2
Prediction Errors for Work Related Activities

Activity	Prediction Errors		Estimation	
	% of Times Omitted	Average Duration Error (Ratio)	Over	Under
University bureaucracy	86.66	.82		-
Get ready for work [#]	57.14	1.19	+	
Study out	35.13	.53	+	
Study at home	33.92	.70	+	
Walk to class	33.33	.60	+	
Drive to class	19.11	.43		-
Work trip	18.75	.41		-
Work	12.82	.17	+	
In class	8.69	.18	+	
Average	33.95	.55	Total	6(66%) 3(33%)

[#]Activity with less than ten but greater than five respondents.

TABLE 3
Prediction Errors for Physical Need Activities

Activity	Prediction Errors		Estimation	
	% of Times Omitted	Average Duration Error (Ratio)	Over	Under
Home Maintenance	85.71	.47	+	
Professional Services	60.00	.86	+	
Shopping	56.25	.70		-
Animal Care [#]	55.55	.64		-
Lunch at Home	53.12	.71	+	
Bath	48.21	.59		-
Child Care	46.66	1.16	+	
Drive To and From (not work)	45.05	.60		-
Lunch Out	38.00	.57		-
Housework	29.16	.48		-
Supper-Dinner	24.63	.53	+	
Breakfast	12.12	.50		-
Get Up in Morning	6.00	.35	+	
Get Up + Breakfast*	4.16	.22	+	
Sleep	0.00	.09		-
Average	37.64	.56	Total 7(46%)	8(53%)

[#] Activity with less than ten but more than five respondents.

* Multiple category not separated due to large number of respondents using it.

TABLE 4
Prediction Errors for Leisure and Social Activities

Activity	Prediction Errors		Estimation	
	% of Times Omitted	Average Duration Error (Ratio)	Over	Under
Snack at Home	90.90	1.04	+	
Have Company In	86.66	.85		-
Correspondence [#]	77.77	.72		-
Telephone	73.68	.89		-
Loaf Out	69.23	.94	+	
Organized Sports [#]	66.66	.79		-
Read Book	65.71	1.05	+	
Loaf at Home	64.28	.88	+	
Visiting Out	63.63	.86		-
Entertainment Out	62.50	.77		-
Beer Out [#]	62.50	.67		-
Talking at Home	60.00	.81		-
Eating Out	56.25	.63		-
Dating	47.05	.69		-
Coffee/Talk OnCampus	44.11	.53	+	
Read Paper	40.00	.53		-
Voluntary Organization	40.00	.45		-
T.V. Watching	38.46	.72	+	
Average	61.63	.77	Total 6(33%)	12(66%)

[#]Activities with less than ten but more than five respondents.

The present data show, as have two previous studies using different populations, that leisure and social activities are those activities that are most flexible in that they are included and dropped out of the day the most. Also, these leisure activities are the least well predicted with respect to time, in that they have the greatest error in the amount of time it is estimated will be spent on them. It is felt that the findings in the present study lend further support to the concept of discretion as the central dimension to the measurement of leisure. Weak support is given to the contention that the routinization of social life as measured by length of time spent in a position reduces the errors in predicting future behaviors.

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